In Two Sections—Section Two

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MECHANICAL ENGINEERING

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Society Affairs

A Record of the Current Activities of the Society, Its Members, Council, Committees, Sections and Student Branches; and Affairs of Interest to the Membership

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
29 West 39th Street, New York

SOCIETY AFFAIRS

Affairs of Interest to the Membership — Secretary's Letter — Among the Local Sections — Student Branch Suggestions — Employment Bulletin — Candidates for Membership

The Secretary's Letter

THE secret of the Society's success is the complete opportunity of self-expression of all the members. Not only are all members encouraged to participate in the freest discussion of technical papers, which, of course, is one of the obvious objects of the Society, but there is similarly the freest opportunity for participation in the selection of officers and in the management of the committees and of the Society's affairs generally.

In the development of the correspondence columns of MECHANICAL ENGINEERING there is an opportunity for discussion without waiting for the two general meetings of the Society. This gives a more extended audience and permits discussion on any subject pertaining to either technical or Society affairs by those who could not get to meetings at all.

Publicity of Society affairs, the same as Government affairs, tends to their higher development, and members are encouraged to avail themselves of this opportunity.

Besides making MECHANICAL ENGINEERING the medium for general discussion, committees on standards, research, etc., can use it as a medium for communication on the development of the work of committees. In other words, the Society has set up the machinery and it is the property of the members, and it is to the members' benefit that they avail themselves of the facilities provided.

There are numerous other plans in the minds of both the Aims and Organization Committee and Publication Committee for making the columns of MECHANICAL ENGINEERING of greater service to the members, and, conversely, it is the duty of the members to secure the benefits from membership in the Society by contributing through the columns of MECHANICAL ENGINEERING their suggestions as to ways in which they can serve their fellow-members of the profession.

CALVIN W. RICE,
Secretary.

Among the Local Sections

BOSTON: (With American Institute of Electrical Engineers, Boston Society of Civil Engineers, Engineering Society of Western Mass., Providence Engineering Society and Worcester Section.)

June 27. June outing at Villa Napoli, Nantasket, Mass. Dinner and dancing.

BRIDGEPORT: (With American Society of Civil Engineers, American Institute of Electrical Engineers, Society of Automotive Engineers, and the Chemical Engineers of the vicinity.)

June 26. Mechanical Apparatus in the Treatment of the Wounded, by Dr. W. Gilman Thompson, of New York; and an original paper by Mr. Boeghold, read by Charles W. Hughes, on Investigation of Case Carburizing and Case Hardening.

ST. LOUIS:

July 10. Meeting at the Midland Valley Country Club. Dinner and dancing. C. F. Hatfield was the speaker of the evening.

The foregoing account of a few meetings held by the Sections since the last issue of MECHANICAL ENGINEERING is indicative of the close of the season, and the Sections' work in the field is in the midst of the usual summer lull.

All but eight of the executive committees throughout the country have reported their officers for the coming year, and these committees are advised to utilize the summer months for the planning of their next season's activities. A summer activity which the Sections might profitably pursue would be the development of their membership. An application form is being printed in this issue of MECHANICAL ENGINEERING and the several good reasons for immediate action are given on the announcement pages at the front of Section One.

The Sections Committee has approved the publication of a Bulletin containing Sections data and this will be regularly distributed to the officers of the various Sections. This bulletin will be sent to any member of the Society upon request.

During the last month two petitions have been received for Sections, one from the members in southern Texas, with headquarters at Houston, and the other from the members in the vicinity of Portland, Oregon. The first of these was approved at the July meeting of the Executive Committee. As soon as the Portland petition is acted upon the Society will have thirty Sections, with meetings in thirty-three cities throughout the United States and one in Canada.

Thus far but four Sections have sent in their annual reports; but it is hoped to have sufficient number in hand to publish a digest of these in the September issue. Of those reports received, among the most interesting items are the following:

The San Francisco Section reports decided success with its plan of a weekly luncheon meeting of the Executive Committee, to which all members of the Section and visitors are welcome. The attendance has averaged from six to twenty-five. On December 4, 1918, the Joint Council of San Francisco Engineering Societies was formed for the purpose of fostering closer relationship among engineering societies of that city, especially in matters where coöperation will make for more efficient service to the state. A service bureau has also been established where a joint endeavor is made to provide a clearing house through which engineers in search of employment may be assisted. This bureau has devoted itself particularly to finding positions for returned engineer soldiers.

The Philadelphia Section has had a successful season, with the outstanding innovation a meeting held out of town, at Wilmington, Del. Other Sections are now discussing a similar procedure.

The Sections at Baltimore, Chicago, Cleveland and Detroit are all interested in joint activities with the engineers of those cities looking toward the erection or purchase of suitable buildings for use as homes for the engineers of those cities. One of the Sections established during the year (the Mid-Continent Section) held an unusually successful all-day meeting at which several papers were presented. The only other Section to attempt all-day sessions has been the Cleveland Section, which has twice held sessions beginning in the morning with technical papers and including excursions in the afternoon, with a dinner and speakers in the evening. The attendance at all of these meetings has been unusually large and approached that of some of the Spring Meetings of the Society.

Leland Stanford Jr. Student Branch Offers Constructive Suggestions

THE following suggestions for the purpose of determining the most successful elements of the present methods of operation and the possible improvements in the nature and scope of the activities of the student branch are taken from the constructive report prepared by the Leland Stanford Jr. Student Branch.

The branch committee which was appointed felt that a more thorough determination of these points might be made by consulting all the members of the student society and accordingly issued a questionnaire. This series of questions appears below, each being followed by a consensus of the general opinions advanced by the membership. Discussion of the report is encouraged.

1 *What is the earliest date in the engineering course at which a student can profitably join the A. S. M. E. Student Branch?* The earliest time to join the A.S.M.E. Student Branch is at the beginning of the junior year. By that time the student has thoroughly decided what department he desires as a major and is in a position

to realize the opportunities and limitations of his particular field. His scholarship and attitude toward the other members of the department will show whether or not he would become an active member of a student organization. The fundamental idea is not so much one of student affairs as one of furthering later professional associations and friendships.

2 *Should admission be free and voluntary when a student reaches this point, or be selective and invitational?* The membership should be elective. However, applications for membership should be available to all men upon becoming juniors in the department.

3 *What are the most profitable activities for the student branch?* The most profitable activities are the discussions by faculty members and practical men of affairs, which provide a means for the informal exchange of ideas and ideals, so important to the student in later life, and the opportunity of meeting former alumni and influential technical men.

4 *How frequently should meetings be held for the best results? At regular times?* Meetings should by all means be regular and as often as is necessary to keep up interest and foster progressive effort. This means at least three meetings in a month.

5 *How about papers by students on things they have seen or done themselves?* Papers by students should be encouraged. The ability to present an idea clearly and concisely in the minimum of time is a very essential part of modern successful engineering practice. When the membership is too large to allow all to present papers, it would be wise to limit this privilege to post-graduates and seniors.

6 *Would addresses on broad topics of importance to the engineer, such as conservation, labor readjustment, distribution of wealth, etc., interest the men?* Addresses on broad topics will serve to connect the specialized engineering field with the surrounding tributary and governing fields. Finance and labor are the student's future problems and he should start to think of them.

7 *Would greater interest in the parent society, such as recognition by publication, prize or scholarship, of the best student paper presented at the student branch meetings be desirable?* Recognition of the student branches by the parent society is desirable if for no other reason than to show the objective of the branch. Too often the student does not realize the importance of the work in hand relative to future problems of actual practice. Prizes for manuscripts, original research and exceptional scholarship are a means of fostering this interest. Invitations to meetings of the parent Society extended to the branch are also desirable.

8 *Suggestions, remarks, etc?* An annual banquet accompanied by a general get-together of the various student branches, the faculties and interested alumni, has been found a success. A general "engineering smoker" in which students in all engineering courses take part has proved popular. Refreshments after meetings is still another suggestion. A definite executive organization that will include all alumni is especially to be desired.

CHEVER KELLOGG
E. J. BAUGHMAN
E. W. C. PEHL

EMPLOYMENT BULLETIN

THE SECRETARY considers it a special obligation and pleasant duty to make the office of the Society the medium for assisting members to secure positions by putting them in touch with special opportunities for which their training and experience qualify them, and for helping any one desiring engineering services. The applications and positions listed below combine the services of the Society and of the Engineering Societies Employment Bureau, on the sixteenth floor of the Engineering Societies Building.

POSITIONS AVAILABLE

Stamps should be inclosed for transmittal of applications to advertisers; non-members must accompany applications with a letter of reference or introduction from a member; such reference letter will be filed with the Society records.

INSTRUCTOR IN MECHANICAL ENGINEERING; location Maryland. R-118.

MARINE-ENGINE DRAFTSMAN; location Wisconsin. R-133.

STRUCTURAL DRAFTSMAN for position with iron works company. Location, Detroit, Michigan. R-140.

MACHINE DESIGNER capable of taking lead on heavy machine tools. Location Illinois. R-233.

DESIGNER AND DRAFTSMAN experienced in designing of buildings, conveyors, and machinery layouts in connection with pulp and paper mills. Location Wisconsin. R-249.

ASSOCIATE EDITOR OF TRADE PUBLICATIONS; technical graduate; under 30 years of age, of recognized college or university; discharged soldier, with two or three years' experience before entering the army preferred; must have good personality and command of English language; knowledge of photography, steam-heating and ventilating work desirable. Duties will combine field and office work. Location New York City. R-381.

POWER DRAFTSMEN wanted immediately for work in Wilmington Office of the E. I. duPont de Nemours & Co. Must be experienced men with thorough understanding of steampower layout and capable of designing and checking boiler house, power house, pump house, etc. R-473.

AUTOMOBILE DRAFTSMAN experienced on motor-truck work, chasses, transmission, axles and motors. Location New York City. R-752.

DRAFTSMAN experienced on power-plant work. Applicant having had experience in mechanical handling of freight desirable. Location New York City; Salary about $160 per month. R-776.

DESIGNER experienced in structural-steel work, figuring stresses. Location Connecticut; Salary $35 per week. R-856.

TOOL DESIGNER with extensive experience on punch and die work. Location New York City. R-858.

AUTOMOBILE ENGINE EXPERT with extensive experience in automobile-engine line, particularly in connection with carburetors. Location Connecticut. R-860.

FOUNDRY SUPERINTENDENT capable of taking entire charge of plant, purchase equipment, etc. Location New York City. R-863.

MECHANICAL ENGINEERING GRADUATE of class of 1918 or 1919 is desired in engineering department of manufacturer of recording meters and power-plant equipment. Engineering graduate recently released from Government service will also be considered. Location Ohio. R-865.

SALES REPRESENTATIVE with knowledge of Spanish market, to represent manufacturers of electrical apparatus. Location Spain. R-872.

METALLURGICAL ENGINEER; technical graduate with at least two or three years' practical experience in the operation of zinc smelters. Duties will be to take charge, under the guidance of superintendent of the smelter, of the operating end of the furnaces, and the roasting kilns, as well as mix room and ore crusher. Man desired should not be over 30 years of age and should be progressive and able to handle men. Location Oklahoma; salary $250 per month. R-877.

SALES ENGINEER; technical graduate with domestic and foreign marketing, advertising and organization experience. Must also have experience in machine tools, automobile machinery and farming machinery. Location New York City. R-880.

FACTORY SUPERINTENDENT; must be familiar with both wood and metal construction. Young married man with technical training and some practical experience is preferred. Applicant must have highest qualifications and character. Plant employs 200 workers and manufactures heavy agricultural implements. Location Indiana. R-895.

MECHANICAL ENGINEER experienced in fruit drying and bleaching. Duties are to design and install complete factory equipment for factory to be erected in Spain. R-898.

SALES ENGINEER with two or three years' business training along engineering or engineering sales lines. Must be college graduate, 23-30 years of age. Location New York City; salary $25-$30 per week. R-900.

DRAFTSMAN experienced on detailing machine parts. Location New York City. R-909.

INSTRUCTOR IN MECHANICAL ENGINEERING with shop experience and executive ability, to have charge of placing co-operative engineering students in industrial establishments. Must have personality that will enable him to make connections with industrial concerns, and to maintain the present system which has been in operation for 13 years; will be required to meet classes in the University, and to discuss subjects related to the practical work of the students. R-917.

COST AND ROUTING ENGINEER with experience in manufacturing costs to make recommendations as to best methods of routing material through factory of manufacturer of fine stationery. Candidates should know details of paper business and printing, and be able to work out suggestions for improving machinery and for reducing cost of manufacturing, handling, packing and loading of writing paper products. Location Mass. R-918.

MECHANICAL ENGINEER experienced on construction work and factory buildings, small machines and plant layouts for position with chemical manufacturing plant. Location New Jersey. R-925.

DESIGNER to do designing and checking of oxy-acetylene apparatus. Man with technical education desired, although one with good practical experience would be considered. Location New Jersey. R-929.

DESIGNER AND DRAFTSMAN experienced in steam engineering on equipment and piping, for position with industrial plant manufacturing dyes, acids and chemicals. Location New Jersey; salary $120-$180 per month. R-930.

ASSISTANT FOUNDRY SUPERINTENDENT in charge of castings division of a U. S. Arsenal. Duties wil be to have charge of molding, cleaning and finishing in foundry making steel, iron and nonferrous castings weighing from ½ lb. to 100,000 lb. each. Man with technical education preferred. Location Mass. R-931.

MECHANICAL AND CIVIL ENGINEER, not over 26 years of age, single, American; previous experience not essential. Location Far East. R-935.

DESIGNER for layout work, with thorough experience in industrial plant engineering work, more particularly of a mechanical nature and also with experience in electrical work; preferably technical man. Location Ohio. R-939.

ENGINEER with considerable experience on automobile transmissions. Location Canada. R-941.

ENGINEER who can invest $10,000 in an established company; one capable of selling and superintending installations of a combustion control system, who is acquainted with the best firing methods for power plants and thoroughly familiar with the details of operation. Location Philadelphia. R-946.

DISTRICT SALES MANAGER; must be good executive, thoroughly familiar with modern sales methods and experienced in power-plant and combustion engineering. Location Michigan. R-947.

SALES ENGINEER; technical graduate who has specialized in power-plant and combustion engineering. Must have good address and be either experienced salesman or prepared to take course of training. Location Michigan. R-948.

DESIGNER AND CHECKER experienced on rolling-mill and steel-works design. Location, Pennsylvania. R-950.

CHIEF ENGINEER. Position as member of staff of technical department of Vacuum Oil Co., Pty. Ltd., in Australia, open to a broad-gage engineer with a number of years' practical experience. Applicant should have a thorough technical training and at least ten years' experience with power-plant and other classes of machinery. Position will involve direction of lubrication engineers on service work and also a large amount of personal field work. Consideration will be given only to men with executive experience and a thorough appreciation of the sales value of engineering service. Application by letter only. R-958.

DRAFTSMAN; recent graduates in mechanical engineering. Location Connecticut; salary $25-$30 per week. R-973.

TOOL DESIGNER with extensive experience on production tool, cutting tool, gages, jigs, automatic machinery, etc. Location Connecticut. R-974.

DRAFTSMAN with extensive experience in the designing of blast furnaces, steel works, or rolling-mill work. Location Pennsylvania. R-975.

MECHANICAL AND ELECTRICAL ENGINEER with experience such as would fit applicant to inspect fire-alarm systems and apparatus. Man from 35-40 years of age desired. Travelling position. R-977.

SALES ENGINEER with practical experience in variety of engineering manufacturies, together with organizing and sales experience in equipment of this nature. Salary $4,000-$4,500 per annum. R-978.

ASSISTANT SUPERINTENDENT experienced as production engineer in the manufacture of welded steel tube and steel stampings. Location Connecticut. R-980.

MECHANICAL ENGINEER; must be college trained man with several years experience on steam engineering. Must know pressure gages and safety valves thoroughly. Location Connecticut. R-988.

DRAFTSMAN; technical education; either recent graduate or man having one or two years' practical experience on punching, shearing, bending or forging machinery. Location Middle West. R-989.

SUPERINTENDENT experienced in manufacture and production of steel-tank work. These tanks are made of plate steel and steel heavier than ¼-inch metal with welded instead of riveted seams. Location Ohio. R-990.

DRAFTSMAN, preferably one with thorough experience in designing of marine, diesel or steam engines of large sizes. Location Connecticut. R-992.

INSTRUCTOR IN MACHINE DESIGN; must be graduate of accredited engineering school. Position is instructing machine design and allied subjects. Location Pennsylvania; salary $140-$180 per month. R-993.

INSTRUCTOR in steam power-plant subjects; graduate of an accredited engineering school. Location Pennsylvania; salary $140-$180 per month. R-994.

SALES ENGINEER; must have good knowledge of internal-combustion engines, principally from the practical end; must have had some actual selling experience and must be capable of handling high-grade prospects. Duties will consist in following the motor-oil development work among manufacturers, securing tests through the engineering departments, furnishing lubricating information to service departments, and finally selling to purchasing agents. Applicants must present good personal appearance, have a good deal of initiative and must be capable of assuming responsibility. Man between the ages of 26 and 30 years desired. Location Middle Western or Eastern territories. R-995.

SALES ENGINEER; must have good theoretical and practical experience on internal-combustion engines; must be a graduate of good technical college, and have had several years' experience in factory work in connection with internal-combustion engines; should also be good salesman and capable of assuming responsibility. Duties will consist in travelling from home office to conduct dynamometer tests among motor manufacturers; to conduct comparative tests to determine the proper grades of oil for different motor purposes; to chart recommendations for both motor vehicles and tractors, and to act as engineering advisor on motor-oil questions. R-996.

TIME KEEPER AND CLERK; technical graduate who can speak Spanish. Duties will be to act as time keeper and to do other allied work in connection with the construction of oil-pipe lines and pumping stations which construction will be in progress for about 6 months. Location Mexico; salary $120 per month plus board and lodging. R-1005.

POWER-PLANT APPRAISERS experienced on power-plant appraisal work. Discharged soldier preferred. Location, Pennsylvania. R-1008.

ASSISTANT PROFESSOR experienced in teaching mechanical or electrical engineering subjects. Location California; salary $2,000 per year. R-1009.

SHOP SUPERINTENDENT with extensive experience in general shop and repair work of all sorts. The shop repairs and reconstructs sugar-mill machinery and makes a lot of miscellaneous minor parts of such equipment in connection with contracts for the equipment of sugar mills. Good practical knowledge of Spanish necessary, so as to be able to handle employees. Location Cuba; salary $7,000-$8,000 per year. R-1015.

DRAFTSMAN; experienced in steam and electric power-station work desirable, but not absolutely necessary. Essential that applicant be able to turn out neat drawings and do good lettering. Location Illinois. R-1016.

DRAFTSMAN experienced in laying out motors and gear drives. Location New Jersey; salary $40 per week. R-1017.

OPERATING AND ADMINISTRATING ENGINEER; must be technical graduate, with at least three years' experience in large steam power-plant work, where 30,000 kw. units are installed, capable of generating 200,000 h.p. Location Ohio. R-1018.

DESIGNER, DRAFTSMAN AND ESTIMATOR experienced on sugar machinery. Location New York City. R-1019.

DESIGNERS AND DRAFTSMEN experienced on crane and derrick work; who understand design, detailing and manufacturing of locomotive cranes, steam shovels, caterpillar tractors; experienced in structural steel design; and gear-train work; men experienced in tracing structural steel and mechanical drawings and layouts; and men experienced in material bill work, weighing up, etc. Location New York City. R-1023.

PRACTICAL FOUNDRYMAN whose training qualifies him to look after the proper mixing of charges, cupola reduction, making of molds, cores and patterns, supervision of labor and making up of cost estimates. Position is one of general assistant. Location Mexico. R-1029.

FACTORY SUPERINTENDENT experienced in substituting mechanical equipment for hand labor. Preferably college graduate familiar with all kinds of conveying and handling equipment; also familiar with handling costs. Vicinity of New York City. R-1030.

INSTRUCTOR IN RADIO TRANSMISSION experienced in and knowledge of the theory and practice of radio transmission, including theory of transit electric phenomena. Man with practical experience with military uses of the radio preferred. Location Minnesota; salary $1,800 per year. R-1031.

INSTRUMENT MAKER with two years' experience in manufacture of surveyors' transits and levels. The work is at the instrument repair shop. Engineer Depot of the U. S. Army, and comprises the repair and adjustment of transits, levels and various other engineering instruments. Location Washington, D. C.; salary $1,800 per year. R-1032.

DESIGNER of intricate high-speed, automatic machinery and also of tools and fixtures. Man with at least five years' experience of varied character so that he will be able to bring new ideas in methods of manufacture. Should also have had shop experience, be thoroughly practical and capable of designing for economical production. Location Maryland. R-1033.

INSTRUCTOR IN MACHINE-SHOP WORK with at least the equivalent of a high-school training. Must be first class all-round machinist with some knowledge of forging. Photograph, references, and full statement of experience and qualifications must accompany application to receive consideration. Location New Hampshire; salary $1,200-$1,300 per year. R-1034.

DRAFTSMAN AND DETAILER for industrial plant layout work; preferably men with experience in elevating and conveying machinery. Salary $175-$200 per month. R-1039.

SALES ENGINEER who has had some first-hand knowledge of industrial haulage problems, and sales experience, who would be interested in doing sales and sales promotion work in connection with industrial tractors, trailers, cars and locomotives in the Philadelphia territory. R-1041.

JUNIOR ENGINEER; young man educated in mechanical lines, particularly with knowledge of internal-combustion engines to develop into sales engineer, demonstrating and selling piston packing. Loctaion New York City. R-1043.

UNITED STATES FOREST SERVICE is in need of assistant chemists, graduates with degree in chemical engineering or four years of practical experience; technical editor with an engineering training and experience combined together with ability to edit reports and articles; engineers with at least 3 years' practical experience for research work; assistant engineers with 4 years' practical experience in engineering. Location, Madison, Wisconsin. R-1048.

ASSISTANT ENGINEER with technical training and experience in construction and repairs of industrial plants, qualified to design special machinery and capable of making layouts of new equipment, so as to obtain efficient utilization of floor space and economical plant operation. Prefer man with experience in chemical plant or office of consulting engineer. Location Southern Ohio. R-1053.

COMPETENT MAN to take charge of meat-packing house in British Guiana. No by-products—straight meat production. English only language necessary. R-1054.

MECHANICAL OR CHEMICAL ENGINEERING SALESMAN for manufacturers of practical boiler feed-water treatment used by steam-power plants all over the world, desire representation in several large cities of the Middle West. Must be aggressive and experienced in power plants. R-1055.

ENGINEERING STUDENT; recent graduate of technical school. Position is with large manufacturing corportaion. Men enter employ of this concern in capacity of students with the idea of being trained in the work of the company. Men living in Western Massachusetts desired. R-1059.

INSTRUCTOR IN HEAT ENGINES; extensive experience in heat engines, machine designs and engineering drawing. Location New Jersey. R-1062.

EXECUTIVE with executive ability, judge of credits and tact. Position is to succeed vice-president and treasurer (deceased) of a manufacturing concern producing high-class brass goods. Location New York City. R-1067.

SALES ENGINEER; mechanical knowledge desirable, though not absolutely essential. Sales experience preferably in the trailer line. R-1068.

INSTRUCTOR IN MACHINE DESIGN; technical graduate with some practical experience in

this line of work desired, although man with only practical experience will be considered. Location Connecticut; salary $1,250 per school year. R-1069.

DESIGNER AND DRAFTSMAN with good engineering training; somewhat familiar with oil refinery and pumping-station practice. Duties will consist of laying out steel tanks, riveted joints, retorts, stills, etc., and some small structural steel building work. Location New York City; salary about $45 per week. R-1070.

COMPETENT STEAM ENGINEER; must be able to speak Spanish. Headquarters Mexico City. R-1076.

DETAIL DRAFTSMAN; young man with good training and shop experience; preferably one capable of making sketches and details from machined parts of automatic book-binding machinery. Location Westchester County; salary $30 per week. R-1078.

TRACER. Young man with good training and education. Location Westchester County, N. Y.; salary $20 per week. R-1079.

DESIGNERS ON MACHINE TOOLS. Should possess knowledge of either design of hand-screw machines or considerable experience in the operation of such machine. Want men with real aptitude for grasping ideas that will be given to them, and from that to work on the design of a machine of the type specified. R-1084.

DRAFTSMEN to design buildings and installation of machinery. Men with experience in structural steel design preferred. Work will be permanent. Location, Elizabeth, N. J.; salary, $125-150 a month. R-1085.

CENTRIFUGAL-PUMP DESIGNER capable of designing impellers to meet varying conditions for an existing line of pumps. One who has also had experience in testing centrifugal pumps is preferred. Please state age, education, experience, names of last three employers, and salary expected. Location, Middle West. R-1089.

JIG AND FIXTURE DESIGNERS with four or five years' experience. Salary $35 per week of 44 hours. R-1090.

CHIEF DRAFTSMAN experienced with modern drafting room, foundry and machine-shop practice to assume responsibility for the engineering department, including designs, standardization of output and standardization of drafting-room practice; to coöperate with shop so that output is designed with view towards quantity production as economically as possible; to design necessary plant equipment. R-1091.

DESIGNING ENGINEER competent in design of high-pressure steam engines of the poppet valve and kindred types. Location, St. Louis. R-1092.

ESTIMATOR AND COST KEEPER with three to four years' experience, preferably one with experience in drafting, to follow up construction work in office and field; compile records of the cost of labor and material, together with time records, and compute unit costs for use in further estimating. Location Niagara Falls, New York. R-1093.

TECHNICAL GRADUATE in mechanical engineering, about 24 years old, to do estimating and sell power-plant equipment in the Eastern States. R-1094.

SALES ENGINEER, who has some chemical knowledge and has acted as assistant or sales manager; 30 to 35 years. Location, New York City. R-1095.

TRACTOR, TOOL AND JIG DESIGNERS AND DRAFTSMEN. Salary from $25 to $50 per week, depending entirely upon the ability of the men employed. Concern manufacturing farm tractors in large quantities, offer positions with excellent chances for advancement to men with ability. Location, Iowa. R-1096.

DRAFTSMEN, experienced in the automobile line preferred, although not essential. Location, Indiana; salary, $125-175 per month. R-1101.

PRODUCER-GAS ENGINEER capable of taking entire charge of producer-gas plant and engine room of 700 h. p. Location, Florida. R-1102.

LARGE MANUFACTURING FIRM in Middle West would like to get in touch with young men who are just finishing University courses in electrical or mechanical engineering, or who left their University courses to enter Army or Navy service and are now looking for employment. Good opportunities will be open for the right men in sales, engineering, design and research work. R-1103.

FIRST-CLASS MARINE-ENGINEERING MEN for drafting department. Location, Staten Island, N. Y. R-1104.

LIVE TRACTOR SALESMAN, especially men with selling experience, although not necessarily tractor-selling experience. Salary and commission in proportion to man's ability. R-1109.

BRANCH MANAGER FOR OFFICE OF CONSULTING ENGINEER in the South West. Must have had extensive experience selling hydraulic machinery and machinery of a similar nature. Must be good engineer, principally well-versed in dealing with mining machinery; must have had Eastern experience. Age 35-45. R-1110.

RAILROAD ENGINEER. Some practical experience with rack-rail work. Position is with contractor who has contract for making survey from San Felipe to Quezaltenango. There will be about 10 miles of a 9 per cent. rack-rail line; the remainder adhesion. Location Quezaltenango, Guatemalo. R-1100.

CHECKER AND DRAFTSMAN wanted by large manufacturing plant located in Eastern Pennsylvania. Must have experience along mechanical lines, preferably power-plant, coal, ash and ore-handling systems, as well as knowledge of structural steel. State age, nationality, references and salary expected in first letter. R-1123.

ENGINEER-EDITOR for associate's position on leading engineering journal in New York. Broad experience, executive ability and good personality, with ability to meet men prominent in the profession are essential characteristics. R-1130.

EDITORIAL ASSISTANT in office of a mechanical journal. Must have had at least two years' technical education and some experience in handling manuscript and proof. R-1161.

MEN AVAILABLE

Only members of the Society are listed in the published notices of this section. Copy for notices should be on hand by the 12th of the month, and the form of notice should be such that the initial words indicate the classification. Notices are not repeated in consecutive issues.

ENGINEERING EXECUTIVE, Stanford University graduate. Ten and one-half years' experience in designing hydraulic, mining and miscellaneous machinery; one year in designing hydroelectric development; four years' in designing, specifying and estimating mechanical equipment of state institutions; one and one-half years' in manufacture of seacoast and railway gun carriages; last six and a half years as engineering department executive. At present employed by U. S. Ordnance Department. Locality preferred, Pacific Coast; age 40; minimum salary, $3,000. A-3421.

TECHNICAL GRADUATE in mechanical engineering, B S degree, Worcester Polytechnic Institute, with three years' experience in shop and drawing room, desires position with chance for advancement. Ensign in Naval Reserves recently placed on inactive duty. Location preferably New England or the Eastern States. Married. Minimum salary, $2000. A-844.

MECHANICAL ENGINEER desires to connect with corporation in engineering capacity; eight years' experience in shop, drafting-room, experimental and process work. Technical graduate; single. Location near or in New York City. A-944.

CONSULTING ASSISTANT, Columbia mechanical engineer graduate; recently discharged from service desires connection with firm of consulting engineers as assistant, where energy, initiative and common sense are chief requirements. One year's practical experience in central-power stations, some machine-shop and draft-room experience. At present employed as appraiser on power-plant equipment. Prefer location in West or Middle West; age 24; minimum salary, $175 per month. A-1206.

TECHNICAL ASSISTANT TO PRESIDENT with exceptional experience in design and factory management as well as knowledge of salesmanship, advertising and accounting. A-2079.

PRODUCTION ENGINEER OR SUPERINTENDENT. 22 years; specialized practical and executive experience in the manufacture of high-grade interchangeable parts, covering wide range of manufacturing in various executive positions; especially qualified in modern factory methods and designing of equipment to increase production at minimum cost; has had very broad, successful experience in handling help and producing results. New York or Eastern location preferred. A-1737.

MECHANICAL ENGINEER; Naval Officer; age 29; seven years of broad engineering experience and practice. Graduate Columbia University, 1913. Experienced draftsman and test man with manufacturer of turbines and pumps. Was in employ of Municipal Traction Co., for a period of two years. Versatile and easily adaptable; would consider sales or any other promising engineering position. Salary expected, to start, $50 per week. A-1972.

EXECUTIVE with twenty years' exceptional experience and proved capacity now completing well-known successful enterprise of considerable magnitude desires connection as manager of a manufacturing and industrial concern where health, energy, capacity, personality and experience can be utilized. A-*2095.

CONVEYING ENGINEER; graduate Cornell 1904, M. E.; 15 years' experience as designing, estimating and sales engineer, covering plant layout and various types of conveyors for every class of material. Production engineer in the Army Ordnance during the war. Release from Army obtainable on one month's notice. A-2752.

WORKS MANAGER OR PRODUCTION MANAGER. Graduate M. E. from Stevens' Institute of Technology; thoroughly versed in scientific management, cost-production methods, planning, scheduling and dispatching; wide experience in manufacturing lines. Would like executive position with well-organized concern. Available at once. A-3248.

EXECUTIVE ENGINEER, member A. S. M. E., A. I. M. E., A. S. C. E., American Society of Ceramic Engineers. Age 35; served as lieutenant-colonel, Engineers in A. E. F. Experienced in railway and highway engineering, industrial management and sales. Limited experience in teaching. Desire permanent employment. Will go anywhere. A-3253.

ASSISTANT SUPERINTENDENT OR CHIEF INSPECTOR; American; age 33; technical mechanical engineering education; twelve years' practical experience in design, manufacture and assembly of interchangeable parts on mass production. Energetic, resourceful, efficient organizer. Can furnish best of references. Desire position in or near Philadelphia. Reasonable salary. A-3266.

MECHANICAL ENGINEER; age 32 years. Ten years' experience in designing, constructing and maintaining plants; also experienced in developing methods to increase production and eliminate waste. At present employed by large shipbuilding concern as plant engineer. Salary desired $4200 per annum. A-3392.

AN ENGINEER, 37 years old, with seven years' teaching experience and twelve years' experience in practice in shop, field and drafting room, in mechanical and structural work, is available for any responsible work in teaching or in practice, in design, construction or operation. A-3394.

MECHANICAL ENGINEER with broad general experience in design and manufacture. A-2079.

COLLEGE AND TECHNICAL GRADUATE with twenty years' practical experience, electrical and mechanical, involving design and construction of light and power distribution, central and sub-station layouts, high and low-tension underground and pole-line transmission, estimation and valuation work desires permanent connection with established firm or industrial plant. Salary dependent on prospects. Best references. A-3395.

MECHANICAL ENGINEER; technical graduate; 5 years' experience including machine design, experimental, mechanical research, sales pro-

motion, inside sales department and some road work. Am ingenious, have inventive ability and a good general knowledge of manufacturing and selling methods. Am at present employed as research engineer with small manufacturing concern. Would prefer foreign position as assistant to office or factory executive. Minimum salary $2100. A-3444.

MANAGER OR SUPERINTENDENT OF WORKS, involving construction; equipment; maintenance; production; development or research. Technically trained in addition to being a practical mechanic (in all the ordinary and special lines.) Exceptional ability for planning and working out large enterprises. Twenty years' extensive business experience, in this and other countries, along the following lines: shops, foundrys, mills, industrial and power plants, special and rapid duplicate production, small, medium and heavy work. Working knowledge of Spanish. Live, progressive and practical leader obtaining the best from men and equipment by tact and common sense methods. Dependable habits, strong influential personality. Desire to connect with reputable party in need of exceptional service with corresponding compensation. Released from Ordnance service. A-3449.

MANUFACTURING EXECUTIVE; technical graduate in mechanical engineering; married; five years' experience in shop and office; manufacturing, development and design on steel-plate products, machine tools, power-plant equipment, instruments and electrical apparatus. Desire position as assistant to manufacturing executive or in sales engineering. New York or New England preferred. A-3452.

SUPERINTENDENT OR ASSISTANT SUPERINTENDENT; high-grade, practical and technical man with 15 years' broad experience on cast-brass and iron products; expert on valves, fittings and engineering specialties; thoroughly up-to-date in every phase of engineering, pattern, foundry, tool and production departments; good organizer. Willing to accept position in plant not on paying basis. Excellent record. A-3486.

WATER WORKS ENGINEER with 12 years' experience in erection, maintenance and operation of pumping machinery of all classes; also in plant layout work, tests, etc. Good technical knowledge along these lines. Have been traveling engineer in charge of 30 plants. A-3508.

GRADUATE MECHANICAL ENGINEER; 25 years old; recently released as engineering ensign in Naval service. Three years' engineering and construction work as assistant engineer; one year shop processes and testing on ordnance work. Production, or erection work preferred. A-3546.

FOREIGN TRADE EXPERT; engineer; degree Ch. E.; exofficier of the U. S. Army. Experienced in technical and commercial lines; wish to secure position as assistant export manager in the United States or as a traveling representative in either Latin-America or in Europe. Has business connections in various parts of the world. Now engaged as foreign grade expert in large concern. Excellent knowledge of French; little Spanish. A-3450.

GRADUATE MECHANICAL ENGINEER; six years' experience in shop methods, inspection, designing and executive work. At present an officer in Naval Aviation Service on engineering work; soon to be released. Also have legal education. Desire an engineering position in or near New York City. A-3461.

SALES ENGINEER; fifteen years' experience in general engineering, conveying installations, chemical plants and gas plants as designer and office executive; good organizer; familiar with placing of contracts, conversant in modern languages. Influential business and social connections here and abroad; married, and good personality. Seeks position in sales or other department with progressive concern. Minimum salary $3500. A-3562.

CHIEF OR ASSISTANT ENGINEER; 14 years' practical experience as toolmaker and designer, chief draftsman and assistant to chief engineer. Thoroughly familiar with design of tools and automatic machines for production of articles ranging from heavy machine tools to small typewriter and gun parts. Inventive ability. Age 31 years; married. Eastern location preferred. Minimum salary $240 per month. A-3593.

RESEARCH AND DEVELOPMENT ENGINEER; can develop ideas or inventions to manufacturing base. A-2079.

GRADUATE UNITED STATES NAVAL ACADEMY; honorable resignation from Navy. Several years' civilian executive experience; enrollment for recent service in U. S. Naval Reserve, with promotion to Lieut. Commander, stationed in China. Recently returned to States. Desire to locate in civilian lines. A-3610.

MECHANICAL ENGINEER; 15 years' experience in both branches of engineering; 10 years to date with one firm in the petroleum industry from draftsman to refinery superintendent. At present engaged as superintendent. Desire change. Minimum salary $6000 in the United States. A-3614.

ASSISTANT MANAGER OR SUPERINTENDENT; mechanical engineer; age 31. Specially experienced in machine-shop and foundry work; including metallurgical control of cupola; also experienced in plant layout and operation, erection of machinery, inspection, cost estimating and determination, and production work. At present in charge of foundry and production department. A-3615.

MECHANICAL ENGINEER; long experience in design and construction of excavating machinery. Competive executive. Served as designing engineer, chief draftsman, superintendent and mechanical engineer. Will soon resign from position connected with munition work. A-3616.

RAILWAY EQUIPMENT ENGINEER; age 30; university graduate; with broad experience on plant layout, machine design, locomotive design and construction, rolling-mill design and erection, high-tension electric installation and small power-plant work. Served in A. E. F. as special engineer in facilities and plant layout work throughout France and Belgium. Thoroughly familiar with purchase of mechanical equipment and with business principles. Available immediately. Location preferably Middle West. A-3617.

EXECUTIVE OR SALES ENGINEER, who can leave Navy very soon, desires connection as executive sales manager, or similar responsible position where executive ability, combined with engineering and business experience is essential. Graduate R. P. I. Electrical with mechanical experience five years, experience electrical one year; Lieutenant Navy Reserve in charge of aircraft supplies, excellent references if desired. A-3618.

MECHANICAL ENGINEER; graduate of Cornell 1914, with three years' machine-shop experience, one year as draftsman; one year on foundation work; two years' organization and management experience; and over two years in the U. S. Army, until recently Captain, Corps of Engineers, desires a position along executive lines with a live growing concern. Chief objective is the opportunity to serve under a really big man with prospects for advancement when ability is demonstrated. Location preferably in the East or Middle West. A-3637.

MECHANICAL OR SALES ENGINEER; age 31; married; at present employed. Four years' railroad engineering experience; four years' oil-refinery experience as construction engineer and superintendent; and past four years as engineer and estimator for large concern doing general steel-pipe, structural and tank work. Would like to connect with some good concern needing a sales engineer or an engineering representative to handle the sale, construction and installation of similar products, engineering specialties, machinery or hardware lines. Have my own car and am familiar with California and southwestern territory. A-3655.

SALES ENGINEER to represent substantial concern in Greater New York and northern New Jersey on commission basis and expenses. Graduated M. E. with shop and executive experience; practical, aggressive, persistent knowledge of export trade; speak French, Spanish, German and Russian. Have traveled abroad for English concern. A-3658.

FACTORY MANAGER OR ASSISTANT. Modern methods of production, high-grade product. A-2079.

RESEARCH AND EXPERIMENTAL ENGINEER; degrees of M. S. and M. E. Eight years' experience conducting research and experimental work on various engineering problems. Would consider responsible position with engineering, industrial or public service organization. Present salary, $3200. A-3672.

EXECUTIVE POSITION desired in high-grade manufacturing concern in northeastern part of country. Graduate 1916 Sheffield Scientific School. Experienced in designing, production, accounting, office management, and business methods. At present first lieutenant Ordnance Department, U. S. A. Available about September 1st. A-3684.

ASSISTANT TO PURCHASING AGENT OR TO SALES MANAGER; graduate engineer 1913 B. S., 1917 M. E. Three years' law training; six years' practical experience including commercial testing of material, heat treatment of iron and steel products. Miscellaneous machine-shop practice. Instructor in industrial educational department of large corporation. Engineer of tests and inspector in Army Ordnance Department. Familiar with general trend of market conditions. Philadelphia vicinity preferred. Minimum salary $2400 per annum. A-3687.

MECHANICAL ENGINEER; graduate of Syracuse University; 29 years of age; married. Open for position requiring executive ability along lines of industrial management work. Past three years' in present position as chief engineer and assistant to manager in a plant of 225 employees. Prefer location in New York State. A-3688.

MECHANICAL ENGINEER; graduate M. E. Nine years' practical experience, largely as turbo-generator and centrifugal compressor designer. Capable of directing design. At present employed but desire change. Minimum salary $3600 per annum. A-3691.

SUPERINTENDENT OR WORKS MANAGER; technical, commercial education and twenty-two years' practical experience in charge of plant employing over 5000 men. Expert on employing and handling labor and familiar with all cost systems. For past two years major U. S. Army in charge manufacture of artillery ammunition. Age 45 years; minimum salary $7500 to start. A-2993.

INDUSTRIAL PLANT ENGINEER; age 29, single; technical graduate; conscientious; thorough and energetic; ten years experience, including design, construction, installation of mechanical equipment, operation and maintenance of industrial plants, also layouts and estimates. At present employed as assistant chief draftsman; desire position as assistant engineer or chief draftsman. A-1761.

PRODUCTION ENGINEER; age 27; Columbia 1915 M. E.; four years' practical experience in drafting, inspection and production work, including systematizing, routing and scheduling; conversant with bookkeeping and accounting. Desire position in production, sales or other department, or as an assistant to an executive, where such experience combined with executive ability can be used to advantage. Location near New York City preferred. A-1819.

ENGINEER; technical graduate 1914. Experienced in design and construction of power plants in all of their mechanical and electrical details. At present holding executive position in chemical industry which is injurious to health. One year's service in Engineer Corps, U. S. A. Married; age 27; minimum salary $2700. A-3089.

MANAGER OR WORKS ENGINEER; technical graduate. Nine years' designing and estimating; five years' sales engineer and sales manager; six years' plant maintenance and construction. Available about September 1st; salary $6000 per annum. A-3726.

COMBUSTION AND PLANT ENGINEER; six years' experience maintenance of plant including supervision of operation of power plant, also revamping of steam distributing, heating and drying systems to utilize steam to the best advantage. Resourceful in overcoming obstacles; efficient and diplomatic in handling men. Desire position with large industrial plant or chain of plants. Location, Middle West or Ohio preferred. A-3727.

WORKS MANAGER OR ASSISTANT. Graduate mechanical engineer; age 35; desires position as executive. Eight years' experience with Penna. Railroad on special technical investigations, shop installations and management; purchase of machinery, etc. Two years in charge of Chicago office for steel company; one and one-half years with Ordnance Department, U. S. A. in charge of engineering and inspection on contract involving millions, on which claims are nearly settled. Open for engagement about August 1; location immaterial. Salary $4500-$6000. A-3728.

SUPERINTENDENT OR PRODUCTION ENGINEER; twenty years' practical experience as mechanic from apprentice to executive, covering the manufacture of steam, diesel, gas and automobile engines, form tools, form cutters, and general line of small tools and ordnance. Excellent knowledge of organization; planning and routing of materials, rate setting and bonus systems. 37 years of age; married; minimum salary $3500. Eastern location. A-1307.

MECHANICAL AND ELECTRICAL ENGINEER; graduate of M. I. T. in both courses, recently released from active service as Lieutenant in Naval Reserve Force. Available for position requiring engineering and business ability. Married; age 35; eight years' experience consulting engineer; two years' general manager traction company; two years production engineer for large company. Highest references; location, foreign or domestic; salary $5000. A-1562.

FACTORY EXECUTIVE; 15 years' executive experience in large organizations. Has clean and successful record on designs, development, production, standardization, inspection and the handling of help for quantity as well as quality production. Experience covers the manufacture of tools, macnine tools, shoe machinery, interchangeable parts, screw machine products and new devices. Only high-grade connection with progressive concern considered. Eastern location preferred. A-3325.

EXECUTIVE AND WORKS ENGINEER; age 36; married; university graduate; licensed structural engineer. Eight years' experience in design, construction and maintenance of steam-electric power plants; two years works and maintenance engineer; at present employed as maintenance engineer in rubber industry. A-3729.

MECHANICAL ENGINEER with three years' practical experience in engineering and manufacturing work wishes position in manufacturing or sales work, preferably along automobile lines, which offers good opportunities for advancement. Has good general knowledge of manufacturing, and is able to handle correspondence. Previously engaged in manufacture of ball bearings. Technical graduate; age 25; unmarried. A-3730.

MECHANICAL ENGINEER; graduate Swiss Technical School with over twelve years' practical experience in this country as draftsman, erecting engineer, maintenance engineer and factory manager. For the past six years employed in an executive capacity by a progressive rubber company. Desirous of making a new connection either here or in foreign service. A-3731.

MECHANICAL ENGINEER recently released from army. Eight years' experience in design and supervision of factory and power plant construction and equipment. Age 32; Cornell graduate. A-2853.

SALES ENGINEER OR ASSISTANT TO AN EXECUTIVE; technical graduate; age 25, with 4 years' experience in building construction and installation of mechanical equipment. Recently released from government service; desire to locate in New York district. Would consider moderate salary to start in position with a future. A-1581.

EXECUTIVE ENGINEER as assistant to president or general manager of manufacturing concern desirous of introducing new methods for improving product. Can make complete mechanical report from personal observation of conditions requiring betterment. Twenty-five years of experience designing automatic machinery and as production superintendent in large factory requiring accuracy in its product. Specialty; introducing new methods to eliminate waste and produce work for assembling by unskilled labor. Recently released from war contract work. Inventor; long experience in designing jigs, fixtures and gauges. Personal interview desired. Salary $5000. A-3762.

MEMBER with 14 years' experience including patent-office routine, machine designing, experimental engineering, factory systematizing and superintendence in automatic industrial machinery, seeks change to broader field without the limitations of usual factory routine. A-3756.

CANDIDATES FOR MEMBERSHIP

TO BE VOTED ON AFTER AUGUST 19

BELOW is a list of candidates who have filed applications since the date of the last issue of MECHANICAL ENGINEERING. These are arranged geographically. Applications for change of grading are also posted. The total number of applications received and listed below is 152.

The Membership Committee, and in turn the Council, urge the members to scrutinize this list with care and advise the Secretary promptly of any objections to the candidates posted. All correspondence in this regard is strictly confidential. Unless objection is made to any of the candidates by August 19, and provided satisfactory replies have been received from the required number of references, they will be balloted upon by the Council.

NEW APPLICATIONS.

Alabama

GABRIEL, JOSEPH A., Special Draftsman, Tennessee Coal, Iron & Railroad Company, Birmingham

Arkansas

CHADWICK, JOHN W., Vice-President, Athletic Mining & Smelting Company, Fort Smith

CROSBY, CHARLES J., Owner Crosby Machine Works, Jonesboro.

California

FORD, ROBERT E., Associate Professor, Throop College of Technology, Pasadena

FRENCH, CARLETON, Sales Engineer and Draftsman, The Worthington Company, Inc., San Francisco

HUTTON, GERALD H., Acting Manager, Marysville Dredging Company, Marigold

KLAUBER, LAURENCE M., Assistant General Superintendent, San Diego Consolidated Gas & Electric Company. San Diego

SAVAGE, ARTHUR J., General Superintendent, A. J. Savage Munitions Company, San Diego

Colorado

VAN LAW, DURBIN, Denver

Connecticut

CRAWFORD, EMERICK B., Engineering Salesman, Oven Equipment & Mfg. Company, New Haven

DELSOLE, JOSEPH H., Foreman of Model and Gauge Shop, Winchester Company, New Haven

HITT, FRED A., Foreman, Pratt & Cady Company, Inc., Hartford

MARCY, LYLE B., Superintendent, Hart & Cooley Company, Inc., New Britain

PERRY, CLARENCE C., Editor, "The Locomotive," The Hartford Steam Boiler Inspection and Insurance Company, Hartford

WOLF, FREDERICK K., Assistant Tool Inspection Supervisor, Winchester Repeating Arms Company, Winchester

Delaware

CHIAVERIN, FRANCIS, Designer, Hercules Powder Company, Wilmington

District of Columbia

GIRYOTAS, WALTER J., Engineer Accountant, United States Railroad Administration, Washington

HANSON MILTON E. Research Mechanical Engineer, American University Experiment Station, Washington.

WHITTET, ARTHUR B., Skilled Draftsman, Technical Staff, Ordnance Office, Washington

Illinois

ALLING CLAUDE R., Engineer, Casualty Department, Underwriters Laboratories, (Re-election) Chicago

ASSELL, WALTER J., Squad Leader, Engineering Department, Illinois Steel Company, Chicago

GIBBS, WEBB L., Lubricating Engineer, The Texas Company, Chicago

HEINZE, MAX P., Production Superintendent, Union Special Machine Company, Chicago.

MOHN, FINN, Chief of Machine Designing Section, Western Electric Company, Inc., Chicago

ROBINSON, THOMAS J., General Manager, Robinson Engineering Company, Chicago

WILLARD, ARTHUR C., Professor, University of Illinois, Urbana

Indiana

CARL, MAURICE R., Mechanical Engineer, Diamond Chain Mfg. Company, Indianapolis

Iowa

ALLEN, RAYMOND H., Student, State University of Iowa, Elkader

Kentucky

GREGORY, WILLIAM K., Conveyor Engineer, Dow Wire & Iron Works, Louisville

Louisiana

KNIPPING, RAINER H., Engineer, A. M. Lockett & Company New Orleans

Maryland

BITTER, KENNETH O., Engineer, F. X. Hooper Company, Inc., Glenarm

KRILL, GEORGE, Foreman of Erection, Bethlehem Ship Corporation, Sparrows Point

MALLOY, WILLIAM E., Lieut. U. S. N., Annapolis

Massachusetts

BLACK, GEORGE, Mechanical Superintendent, Berkshire Cotton Company, Adams

GARDNER, DWIGHT R., Gage Designer, Greenfield Tap & Die Corporation, Greenfield

LANNON, JAMES J., Treasurer & Manager, Grant Gear Works, Boston

MANTER, ELWOOD M., Engineering Draftsman, Perry & Whipple, New Bedford

MANUELIAN, HAMAZZSB D., Assistant to Works Engineer, U. S. Cartridge Company, Lowell

PROCTOR, GEORGE A., Mechanical Engineer, Grant Gear Works, Inc., Boston

RYAN, FRANCIS M., Efficiency Engineer, Norton Company, Worcester

STEARNS, WALTER I., Industrial Engineer, Cooley & Marvin Company, Boston

WILLIAMSON, DANIEL W., Mechanical Superintendent Farr Alpaca Company, Holyoke

Michigan

BLAUVELT. WARREN S., Consulting Engineer, Detroit

BROWN, CONFORT E., Captain, Ordnance Department, U. S. A., Charge of Shell Ammunition at Detroit District, Detroit

FERRIS, DONALD M., Harbor Beach

GREEN, HEATLEY, President, Automatic Products Company, Detroit

HAMILTON, JAMES C., Chassis Designer, Oakland Motor Car Company, Pontiac

PERRY, WALTER B., Factory Superintendent, Industrial Works, Bay City

PETIT, WILLIAM H., Partner, DeKam & Petit, Detroit
SPALDING, JOHN D., Chief Draftsman, Smalley-General Company, Bay City

Missouri

GROTE, HENRY C., Assistant Chief Engineer, Monsanto Chemical Works, St. Louis
WAGNER, HUGH K., Patent Lawyer, St. Louis

Nebraska

BUNTING, ALBERT, Assistant Professor of Practical Mechanics, University of Nebraska, Lincoln

New Jersey

AMOS, ALEXANDER R., J., Ensign, U. S. N. R. F., Hoboken
HOLLANDER, ALADAR, Chief Engineer, Lea-Courtenay Company, Newark
JOHN, FREDERICK W., Corn Products Refining Company, Edgewater
KOLBERT, ALEXANDER W., Assistant General Manager and Sales Manager, Hart Roller Bearing, Orange
KREBS, GEORGE J., Assistant Engineer, American Sugar Refining Company, Jersey City
NICHOLAS, ANDREW J., Testing Department, Ingersoll Rand Company, Phillipsburg
SHONNARD, HAROLD W., Consulting Engineer, Crucible Steel Company of America, Upper Montclair
STIRES, WILLIAM H., Chief Estimating Engineer, Taylor-Wharton I. & S. Company, High Bridge
WHITE, GEORGE C., General Superintendent, Beaver Machine & Tool Company, Inc., Newark
WILLIAMS, ALBERT H., Works Manager, Hart Roller Bearing Company, Orange

New York

BROMLEY, CHARLES H., Associate Editor, "Power," New York
BULL, FREDERICK C., Major, Chief of Section, Artillery Ammunition & Trench Warfare, New York District, New York
BURNELL, EUGENE, Works Manager, Atlantic Loading Company, New York
CARLOTH, JOSEPH J., Chief Draftsman, J. F. Musselman, Consulting Engineer, New York
CATHER, JAY *H.*, Charge of Power, Eastman Kodak Company, Rochester
DOUGHERTY, PATRICK J., Designing Engineer, International Heater Company, Utica
DWYER, LEON W., Head of Tool and Gauge Inspection, Watervliet Arsenal, Watervliet
EIBSEN, LOUIS J., Engineer, The Foundation Company, New York
FREW, GEORGE H., Jr., Assistant to Manager, Asiatic Machinery Sales Department, W. R. Grace & Company, New York
FRIEND, WILLIAM H., Chief Engineer, Mashek Engineering Company, New York
GARDNER, ROBERT S., Industrial Engineer, New York
GARVEY, WRIGHT B., Estimator, Watervliet Arsenal, Watervliet
GERARD, MAURICE G., Industrial Engineer, Gerard-Graham & Company, New York
GOYNE, WILLIAM J., Specifications and Design of Locomotives, American Locomotive Company, New York
LANDI, ARCHILLE A., New York
LE BLANC, ALEXIS, Appraisal Expert, Aircraft Production Board, New York
McCARTHY, THOMAS E. M., New York University, New York
MENZIES, JOHN C., Sales Correspondent, Hyatt Roller Bearing Company, New York
NICOL, NORMAN C., Metallurgical Department, National Tube Company, New York
PERRY, CHARLES T., Mechanical Engineer, Dept. Plants & Structures, City of New York, New York
SPADE, WILLIAM P., Assistant Superintendent, Tool Dept., Watervliet Arsenal, Watervliet
THOMAS, WILLIAM A., 3rd, Sales Engineer, Wilson Welder & Metal Company, Inc., New York
WARD, GEORGE A., Designing Engineer, Wilputte Coke Oven Corporation, New York
WEBSTER, EDWARD S., Assistant Foreman, Watervliet Arsenal, Watervliet
WOOLLEY, REW E., Engineering and Sales Work, General Electric Company, Schenectady
ZEUNER, CHARLES F., New York

Ohio

CARNEY, THOMAS, Designer, Willys-Overland Company, Toledo
GREGORY, GUY, Manager, Cleveland Pneumatic Tool Company, Cleveland
HOWETT, JOHN M., Sales Engineer, Hannifin, Manufacturing Company, Dayton
KEENER, GLENN G., Designing Engineer, The McMyler Interstate Company, Bedford
LINDMUELLER, EDWARD, Consulting Mechanical Engineer, Cleveland
MENCKE, JOHN W. H., Sales Engineering Staff, Goodyear Tire & Rubber Company, Akron
NEMEC, CHARLES J., Mold Designer, Aluminum Castings Company, Cleveland
REEVES, THOMAS W., Superintendent, McNaull Boiler Manufacturing Company, Toledo
ROLF, HERMAN L., President & Manager, The Rolf Heater Manufacturing Company, Columbus
TAPPENDEN, RICHARD L., Vice-President, Horsburgh Forge Company, Cleveland

Oklahoma

KIRBY, WILLIAM K., Chief Draftsman, Empire Gas & Fuel Company, Bartlesville

Pennsylvania

BENEDICT, LOYAL C., Rate Foreman, Western Electric & Manufacturing Company, E. Pittsburgh
DESSEN, EINAR, Sales Engineer, Malin Engineering Company, Philadelphia
DODGE, KARL, 1st Lieutenant, Ordnance, U. S. Army, Philadelphia
FISHER, CHARLES E., Chief Engineer, Titusville Iron Works Company, Titusville
FREY, WILLIAM P., Fuel Engineer, Lehigh Coal & Navigation Company, Lansford
GRONTOFT, ARNLJOT F. C., District Statistician, U. S. Shipping Board, Emergency Fleet Corporation, Philadelphia
HALLOCK, JOHN W. W., Director of Co-operative Work, University of Pittsburgh, Pittsburgh
HESSDOERFER, GEORGE M., Jr., Eastern Sales Engineer, Abell-Howell Company, Philadelphia
HESSELINK, LAWRENCE R., Assistant Chief Draftsman, Standard Engineering Company, Elwood City
HITCHEN, MAURICE, Purchasing Agent, Emergency Fleet Corporation, Philadelphia
LLOYD, LINUEL P., Cadet Engineer, United States Shipping Board, Philadelphia
LUND, JOHN, Division Superintendent, Bethlehem Steel Company, Bethlehem
MARTIN, EVAN S., Manager, Cummings Structural Concrete Company, Philadelphia
MAYNARD, ALMY C., Mechanical Engineer, Eagan Rogers Steel & Iron Company, Crumm Lynne
REPA, MICHAEL, Wilkes-Barre
VEENSCHOTEN, VINCENT V., Northern Equipment Company, Erie

Texas

ANDERSON, REXFORD O., Mechanical Engineer, International Marine Iron Works, Houston
DEWEY, MAURICE J., Assistant Mechanical Engineer, The Texas Company, Houston

Virginia

DRAKE, RALPH L., Maintenance Egineer, American Locomotive Company, Richmond
LUDWICK, WILLIAM A., Lubrication Engineer, The Texas Company, Norfolk
STEVENS, FREDERIC R., Chief Engineer, Alco Plant, American Locomotive Company, Richmond

West Virginia

CHAPMAN, ARTHUR W., Consulting Engineer, West Virginia Pulp & Paper Company, Piedmont

Wisconsin

DODGE, ADIEL Y., Assistant Plant & Tool Engineer, Wallis Tractor Company, Racine
LEWIS, CHARLES M., Mechanical Engineer, Badger Malleable & Mfg. Company, South Milwaukee

Canada

ADAMS, ERWIN A., Advertising Manager, Canadian Fairbanks Morse Company, Ltd., Montreal

Cuba

DALLAS, CHARLES F., Engineer, Honolulu Iron Works Company, Havana
ESTRADO, LUIS F., Specializing in Insurance, Havana

England

CAMERON, ARCHIBALD P., Engineer, Messrs. Worthington-Simpson, Ltd., London
SOUTHERN, HERBERT, Senior Draftsman, Messrs. Steel Peech & Tozer, Ltd., Sheffield

France

DeMEEUS, PIERRE, Technical Agent of Societe Metallurgique de Montbard Aulnoye, Paris
NUGUE, PIERRE, Administrateur, Societe des Etablissements Ct. Pinette, Chalon-Sur-Saone
PERREAUD, VICTOR P., Member, French Mission of Reconstruction in U. S. A., Paris

India

SRINIVASAIYENGAR, K., Loco Superintendent, Mysore State Railways, Bangalore

Japan

CUMMINS, LEON V., Metallurgist and Testing Engineer, Yokohoma

CHANGE OF GRADING
PROMOTION FROM ASSOCIATE

Indiana

WRIGHT, DONALD C., Production Manager, Dodge Mfg. Company, Mishawaka

Maryland

MITCHELL, GUY K., President, Standard Electric & Elevator Company, Inc., Baltimore

New Jersey

MATHEY, HENRY C., Manager, Okonite Company, Passaic

New York

SAMPSON, GEORGE T., Mechanical Engineer, American Can Company, New York
YODER, THOMAS M., Assistant District Sales Agent, Erie City Iron Works, New York

PROMOTION FROM ASSOCIATE MEMBER

California

CLARK, HAROLD H., Manager, Link-Belt Company, Los Angeles

Illinois

AVERY, A. ORDELL, Chief of Layout & Investigation Department, Western Electric Company, Inc., Chicago
THOMA, WALTER, Chief Inspector, E. W. Bliss Company, Brooklyn

PROMOTION FROM JUNIOR

Connecticut

GAYLORD, WILLIAM W., Chief Draftsman, The American Brass Company, Torrington

Illinois

ALSBERG, JULIUS, Consulting Engineer, Chicago

Michigan

FOX, RUDOLPH H., Sales Engineer, Gurney Ball Bearing, Detroit
HAYNES, HASBROUCK, President, Hasbrouck Haynes & Company, Chicago

New York

REESE, DALE F., Superintendent, Engineering Department, Ocean Accident & Guarantee Corporation, Ltd., New York
TAG, WALTER, Knickerbocker Ice Company, New York
VEHSLAGE, HAROLD E., Consulting Mechanical Engineer and Merchant, H. J. Baker & Bro., New York

Ohio

LYDECKER, KENNETH, Division Manager, The White Company, Cleveland
STERLING, C. H., Chief Engineer, Kelly-Springfield Motor Truck Company, Springfield

Cuba

STANCLIFF, ARTHUR D., Superintendent, Cuban Portland Cement Company, Mariel

SUMMARY

New Applications	134
Applications for change of grading	
Promotion from Associate	5
Promotion from Associate-Member	3
Promotion from Junior	10
Total	152